Serial No. 09/740,053 NIT-244

IN THE CLAIMS

1. (Currently Amended) An integrated thin film head, comprising:

a lower shield layer formed on a substrate;

a lower readgap layer formed on said lower shield layer;

an MR sensor layer formed on said lower readgap layer;

a lead layer joined with said MR sensor layer;

an upper lead layer formed partially in contact with said lead layer~~,~~;

_____an upper readgap layer formed to cover said MR sensor layer~~,~~

~~_____~~, lead layer and upper lead layer; and

an upper shield layer formed on said upper readgap layer,

wherein a thickness of a part of the lead layer in contact with the upper lead layer is ~~formed thinner~~ less than ~~the~~ a thickness (a) of a part ~~thereof~~ of the lead layer not in contact with the upper lead layer, and thickness (c) < (thickness(a) + thickness (b)), where thickness (c) is the total thickness of the lead layer and the upper lead layer where the position of the upper lead layer is in contact with the lead layer, and thickness (b) is the thickness of a portion of the upper lead layer not in contact with the lead layer.

2. (Currently Amended) An integrated thin film head according to claim 1, wherein the lower shield layer ~~is covered with the flat surface shape of~~ formed on the substrate has a length (d), measured perpendicular to the read/write surface of the integrated thin film head, that is less than a combined length (e), measured perpendicular to the read/write surface of the integrated thin film head, of the MR sensor layer and lead layer ~~in the size smaller than the flat surface shape~~ formed on the lower readgap layer.

3. (Currently Amended) An integrated thin film head according to ~~claim 2, wherein~~ claim 1, further comprising:

~~an~~at least one of a first additional protective layer ~~of lower readgap is included among~~ formed between said lower shield layer~~, filler material~~ and said lower readgap layer, ~~and/or wherein an additional protective layer of upper readgap is included between said upper readgap layer and upper shield layer~~ and a second additional protective layer formed between said lower readgap layer and said lead layer and upper lead layer.

4. (Currently Amended) An integrated thin film head, comprising:

an undercoat layer formed on a substrate;

a lower shield layer;

a filler material filling ~~the~~ a stepped area of said lower shield layer;

a lower readgap layer formed on said lower shield layer and filler material;

an MR sensor layer formed at the position facing to the opposing surface of a recording medium on said lower readgap layer;

a lead layer joined with said MR sensor layer in the reverse side to the opposing surface of recording medium;

an upper lead layer formed to extend in the reverse direction in contact with a part of said lead layer;

an upper readgap layer formed to cover said MR sensor layer, lead layer and upper lead layer; and

an upper shield layer formed on said upper readgap layer,

wherein ~~the~~ a thickness of a part of said lead layer ~~not~~ in contact with the upper readgap layer is ~~formed thinner~~ less than ~~the~~ a thickness (a) of a part ~~thereof~~ of the lead layer in contact with the upper readgap layer, and a thickness (c) < (thickness (a) + thickness (b)), where thickness (c) is the

total thickness of the lead layer and the upper lead layer where the portion of the upper lead layer is in contact with the lead layer, and thickness (b) is the thickness of a portion of the upper lead layer not in contact with the lead layer.

5. (Currently Amended) An integrated thin film head according to claim 4, wherein said lower shield layer ~~is covered with the flat surface shape of~~ formed on the substrate has a length (d), measured perpendicular to the read/write surface of the integrated thin film head, that, is less than a combined length (e) said MR sensor layer and lead layer ~~and is formed smaller than said flat surface shape~~ formed on the lower readgap layer.

6. (Currently Amended) An integrated thin film head according to ~~claim 5, wherein~~ claim 4 further comprising:

~~an~~at least one of a first additional protective layer ~~of lower readgap is included among~~ formed between said lower shield layer~~, filler material~~ and said lower readgap layer, ~~and/or wherein an additional protective layer of upper readgap is included between said upper readgap layer and upper shield layer~~ and a second additional protective layer formed between

said lower readgap layer and said lead layer and upper lead layer.

Claims 7-9 (Canceled)

10. (New) An integrated thin film head according to claim 1, further comprising:

at least one of a first additional protective layer formed between said upper shield layer and said upper readgap layer, and a second additional protective layer formed between said upper readgap layer and said lead layer and upper lead layer.

11. (New) An integrated thin film head according to claim 4, further comprising:

at least one of a first additional protective layer formed between said upper shield layer and said upper readgap layer, and a second additional protective layer formed between said upper readgap layer and said lead layer and upper lead layer.

12. (New) An integrated thin film head, comprising:

a lower shield layer formed on a substrate;

a lower readgap layer formed on said lower shield layer;

an MR sensor layer formed on said lower readgap layer;

a lead layer joined with said MR sensor layer;

an upper lead layer formed partially in contact with said lead layer;

an upper readgap layer formed to cover said MR sensor layer, lead layer and upper lead layer; and

an upper shield layer formed on said upper readgap layer,

wherein said lead layer includes a first part including a part in contact with said MR sensor and a second part which is continuous with said first part and is thinner than said first part, and said portion of said upper lead layer overlaps said second part of said lead layer.

13. (New) An integrated thin film head according to claim 12, wherein thickness (c) < (thickness (a) + thickness (b)), where thickness (a) is the thickness of the first part, thickness (b) is the thickness of a portion of the upper lead layer not in contact with the lead layer, and thickness (c) is the combined thickness of said portion of the upper lead layer overlapping said second part of said lead layer and said second part.

14. (New) An integrated thin film head according to claim 13, further comprising:

at least one additional protective upper layer which is formed between said upper shield layer and said lead layer and upper lead layer, and at least one additional protective lower layer which is formed between said lower shield layer and said lead layer and upper lead layer,

wherein said at least one additional upper protective layer includes one of a first additional upper protective layer formed between said upper shield layer and said upper readgap layer, and a second additional upper protective layer formed between said upper readgap layer and said lead layer and upper lead layer, and

wherein said at least one additional lower protective layer includes one of a first additional lower protective layer formed betweens aid lower shield layer and said lower readgap layer, and a second additional lower protective layer formed between said lower readgap layer and said lead layer and upper lead layer.

15. (New) An integrated thin film head according to claim 14, wherein said at least one additional protective lower layer does not extend under said MR sensor layer, and

said at least one upper additional protective layer does not extend over said MR sensor layer.

16. (New) An integrated thin film head according to claim 14, wherein each of said additional protective layers is formed of non-magnetic material.